1. Use video as a hook, to peak students’ interest, and start them on a path to inquiry.
2. Once video is played, maybe a couple of times, get the students to write down thoughts and tell them we will revisit this later.
3. Ask them to get into groups of 4, numbering each other one to 4 and to continue with the instructions on their hand-out and using their article that had been added to the wiki site.
4. After students have completed the cooperative learning activity, we come back as a group to discuss the results/findings of the activity.
5. The “hook” will then be revisited as the paper is up on **Smartboard** – and we go through it, highlighting areas/sections, purpose, results, etc. I will point out the link between the paper and the video in terms of proteins, fluorescence and microscopy techniques and will have **extra powerpoint material** (attached) to show how a 2D microscopic image can be rendered into a 3D image and what added information might be learned from that. I will show the video again.
6. The evaluation of the assignment will consist of each person writing a paragraph on what the purpose of the study was, what were the results and what conclusions were made.  They must also include how they   
   read the article (i.e. what order, if they skipped anything) to come up with their answers, as well as the application of what they have learned to reading/reviewing a second article of their choice.  I will use **a rubric** (attached)for this to assess (only the comprehension part).
7. Taking in the ideas of the group I will consolidate the information to describe the way to read a paper, and actually the order (of the sections:  intro, results, etc.) in which a paper actually is written (which is not necessarily the order in which it is published).  This is an exercise on becoming familiar and comfortable with reading papers, and also to understand that new discoveries are always happening (latest research part). I will also emphasize the importance of proteins (everywhere and have many functions within the cell) – the functional translations of our DNA!
8. Finish off with an introduction to **Wordles (www.wordle.net)**, their use especially in epigenetics (discussing **misconception** that gene expression cannot be changed (unless DNA mutated). I will show an example to class – “wordle of biochem unit”, and describe this portion of assignment which will be a diagnostic (as and for learning) assessment of what the students learned.

**Notes:**

***Wordles*** – take unit plan and paste into wordle – can present the unit in this way!? Can add weights – will change wordle – students will create a wordle with paper they will be examining – most important/essential parts, or on how they went about analyzing it? Another similar program that allows you to create wordles and other “visualizations”: Many Eyes, IBM: <http://www.958.ibm.com/software/data/cognos/manyeyes/>